

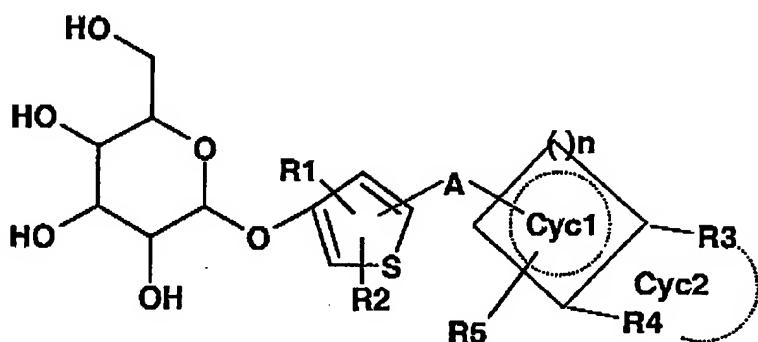
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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A compound of the formula I



wherein

R1, R2 are, independently of each other, hydrogen, F, Cl, Br, I, OH, NO<sub>2</sub>, CN, COOH, CO(C<sub>1</sub>-C<sub>6</sub>)-alkyl, COO(C<sub>1</sub>-C<sub>6</sub>)-alkyl, CONH<sub>2</sub>, CONH(C<sub>1</sub>-C<sub>6</sub>)-alkyl, CON[(C<sub>1</sub>-C<sub>6</sub>)-alkyl]<sub>2</sub>, (C<sub>1</sub>-C<sub>6</sub>)-alkyl, (C<sub>2</sub>-C<sub>6</sub>)-alkenyl, (C<sub>2</sub>-C<sub>6</sub>)-alkynyl, (C<sub>1</sub>-C<sub>6</sub>)-alkoxy, HO-(C<sub>1</sub>-C<sub>8</sub>)-alkyl, (C<sub>1</sub>-C<sub>6</sub>)-alkoxy-(C<sub>1</sub>-C<sub>6</sub>)-alkyl, phenyl, benzyl, or (C<sub>1</sub>-C<sub>4</sub>)-alkylcarbonyl,

wherein one, more than one or all hydrogens in the alkyl or alkoxy radicals are optionally replaced by fluorine;

SO<sub>2</sub>-NH<sub>2</sub>, SO<sub>2</sub>NH(C<sub>1</sub>-C<sub>6</sub>)-alkyl, SO<sub>2</sub>N[(C<sub>1</sub>-C<sub>6</sub>)-alkyl]<sub>2</sub>, S-(C<sub>1</sub>-C<sub>6</sub>)-alkyl, S-(CH<sub>2</sub>)<sub>o</sub>-phenyl, SO-(C<sub>1</sub>-C<sub>6</sub>)-alkyl, SO-(CH<sub>2</sub>)<sub>o</sub>-phenyl, SO<sub>2</sub>-(C<sub>1</sub>-C<sub>6</sub>)-alkyl, or SO<sub>2</sub>-(CH<sub>2</sub>)<sub>o</sub>-phenyl,

wherein o is 0-6 and wherein the phenyl radical is optionally substituted up to twice, each substituent chosen independently from F, Cl, Br, OH, CF<sub>3</sub>, NO<sub>2</sub>, CN, OCF<sub>3</sub>, (C<sub>1</sub>-C<sub>6</sub>)-alkoxy, (C<sub>1</sub>-C<sub>6</sub>)-alkyl, and NH<sub>2</sub>;

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$\text{NH}_2$ ,  $\text{NH}(\text{C}_1\text{-C}_6)\text{-alkyl}$ ,  $\text{N}((\text{C}_1\text{-C}_6)\text{-alkyl})_2$ ,  $\text{NH}(\text{C}_1\text{-C}_7)\text{-acyl}$ , phenyl, or  $\text{O}(\text{CH}_2)_o\text{-phenyl}$ ,

wherein  $o$  is 0-6 and wherein the phenyl ring is optionally substituted one to 3 times, each substituent chosen independently from F, Cl, Br, I, OH,  $\text{CF}_3$ ,  $\text{NO}_2$ , CN,  $\text{OCF}_3$ ,  $(\text{C}_1\text{-C}_6)\text{-alkoxy}$ ,  $(\text{C}_1\text{-C}_6)\text{-alkyl}$ ,  $\text{NH}_2$ ,  $\text{NH}(\text{C}_1\text{-C}_6)\text{-alkyl}$ ,  $\text{N}((\text{C}_1\text{-C}_6)\text{-alkyl})_2$ ,  $\text{SO}_2\text{-CH}_3$ ,  $\text{COOH}$ ,  $\text{COO}(\text{C}_1\text{-C}_6)\text{-alkyl}$ , and  $\text{CONH}_2$ ;

A is  $(\text{C}_0\text{-C}_{15})$  alkanediyl, wherein one or more carbon atoms in the alkanediyl radical are optionally replaced, independently of one another, by  $\text{O}^-$ ,  $(\text{C}=\text{O})^-$ ,  $\text{CH}=\text{CH}^-$ ,  $\text{C}=\text{C}^-$ ,  $\text{S}^-$ ,  $\text{CH}(\text{OH})^-$ ,  $\text{CHF}^-$ ,  $\text{CF}_2^-$ ,  $(\text{S}=\text{O})^-$ ,  $(\text{SO}_2)^-$ ,  $\text{N}((\text{C}_1\text{-C}_6)\text{-alkyl})^-$ ,  $\text{N}((\text{C}_1\text{-C}_6)\text{-alkylphenyl})^-$  or  $\text{NH}^-$ ;  $=\text{CH}=\text{CH-CH}_2$ - or  $(\text{C}_1\text{-C}_4)\text{-alkanediyl}$ , wherein one or two  $\text{CH}_2$  groups are optionally replaced by  $-(\text{C}=\text{O})^-$ ,  $-\text{CH}=\text{CH}^-$ ,  $-\text{CH}(\text{OH})^-$ ,  $-\text{NH}^-$ ,  $-\text{CHF}^-$ ,  $-\text{CF}_2^-$ , or  $-\text{O}^-$ ;

n is a number 2 or 3 from 0 to 4;

Cycl is a 3 to 7 membered, saturated, partially saturated or unsaturated ring, wherein 1 carbon atom is optionally replaced by O or S; is unsaturated ring, wherein 1 carbon atom is optionally replaced by O or S;

R3, R4, R5 are, independently of each other, hydrogen, F, Cl, Br, I, OH,  $\text{NO}_2$ , CN,  $\text{COOH}$ ,  $\text{COO}(\text{C}_1\text{-C}_6)\text{-alkyl}$ ,  $\text{CO}(\text{C}_1\text{-C}_4)\text{-alkyl}$ ,  $\text{CONH}_2$ ,  $\text{CONH}(\text{C}_1\text{-C}_6)\text{-alkyl}$ ,  $\text{CON}[(\text{C}_1\text{-C}_6)\text{-alkyl}]_2$ ,  $(\text{C}_1\text{-C}_8)\text{-alkyl}$ ,  $(\text{C}_2\text{-C}_6)\text{-alkenyl}$ ,  $(\text{C}_2\text{-C}_6)\text{-alkynyl}$ ,  $(\text{C}_1\text{-C}_{12})\text{-alkoxy}$ ,  $\text{HO}(\text{C}_1\text{-C}_6)\text{-alkyl}$ , or  $(\text{C}_1\text{-C}_6)\text{-alkoxy-(C}_1\text{-C}_6)\text{-alkyl}$ , wherein one, more than one or all hydrogens in the alkyl and alkoxy radicals are optionally replaced by fluorine;

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$\text{SO}_2\text{-NH}_2$ ,  $\text{SO}_2\text{NH}(\text{C}_1\text{-C}_6)\text{-alkyl}$ ,  $\text{SO}_2\text{N}[(\text{C}_1\text{-C}_6)\text{-alkyl}]_2$ ,  $\text{S}-(\text{C}_1\text{-C}_6)\text{-alkyl}$ ,  $\text{S}-(\text{CH}_2)_o\text{-phenyl}$ ,  $\text{SO}-(\text{C}_1\text{-C}_6)\text{-alkyl}$ ,  $\text{SO}-(\text{CH}_2)_o\text{-phenyl}$ ,  $\text{SO}_2-(\text{C}_1\text{-C}_6)\text{-alkyl}$ , or  $\text{SO}_2-(\text{CH}_2)_o\text{-phenyl}$ ,

wherein  $o$  is 0-6 and wherein the phenyl radical is optionally substituted up to twice, each substituent chosen independently from F, Cl, Br, OH,  $\text{CF}_3$ ,  $\text{NO}_2$ , CN,  $\text{OCF}_3$ ,  $(\text{C}_1\text{-C}_6)\text{-alkoxy}$ ,  $(\text{C}_1\text{-C}_6)\text{-alkyl}$ , and  $\text{NH}_2$ ;

$\text{NH}_2$ ,  $\text{NH}-(\text{C}_1\text{-C}_6)\text{-alkyl}$ ,  $\text{N}((\text{C}_1\text{-C}_6)\text{-alkyl})_2$ ,  $\text{NH}(\text{C}_1\text{-C}_7)\text{-acyl}$ , phenyl,  $(\text{CH}_2)_o\text{-phenyl}$ ,  $\text{O}-(\text{CH}_2)_o\text{-phenyl}$ ,

wherein  $o$  is 0-6 and wherein the phenyl ring is optionally substituted one to 3 times, each substituent chosen independently from F, Cl, Br, I, OH,  $\text{CF}_3$ ,  $\text{NO}_2$ , CN,  $\text{OCF}_3$ ,  $(\text{C}_1\text{-C}_8)\text{-alkoxy}$ ,  $(\text{C}_1\text{-C}_6)\text{-alkyl}$ ,  $\text{NH}_2$ ,  $\text{NH}(\text{C}_1\text{-C}_6)\text{-alkyl}$ ,  $\text{N}((\text{C}_1\text{-C}_6)\text{-alkyl})_2$ ,  $\text{SO}_2\text{-CH}_3$ ,  $\text{COOH}$ ,  $\text{COO}-(\text{C}_1\text{-C}_6)\text{-alkyl}$ , and  $\text{CONH}_2$ ;

or

R3 and R4 together with the carbon atoms carrying them are a 5- to 7-membered, saturated, partially or completely unsaturated ring Cyc2,  
wherein 1 or 2 carbon atoms in the ring are optionally replaced by N, O or S, and  
wherein Cyc2 is optionally substituted by  $(\text{C}_1\text{-C}_6)\text{-alkyl}$ ,  $(\text{C}_2\text{-C}_5)\text{-alkenyl}$ ,  $(\text{C}_2\text{-C}_5)\text{-alkynyl}$ ,  
wherein, in each substituent of Cyc2, one  $\text{CH}_2$  group is optionally replaced by O, or substituted by H, F, Cl, OH,  $\text{CF}_3$ ,  $\text{NO}_2$ , CN,  $\text{COO}(\text{C}_1\text{-C}_4)\text{-alkyl}$ ,  $\text{CONH}_2$ ,  $\text{CONH}(\text{C}_1\text{-C}_4)\text{-alkyl}$ , or  $\text{OCF}_3$ , and

R5 is hydrogen;

or a pharmaceutically acceptable salt thereof.

2. (Currently Amended) A The compound as claimed in of claim 1, wherein A is linked to the thienyl ring in position 2.

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3. (Currently Amended) A The compound as claimed in of claim 1, wherein

R1, R2 are, independently of each other, hydrogen, F, Cl, Br, I, OH, NO<sub>2</sub>, CN, COOH, CO(C<sub>1</sub>-C<sub>6</sub>)-alkyl, COO(C<sub>1</sub>-C<sub>6</sub>)-alkyl, CONH<sub>2</sub>, CONH(C<sub>1</sub>-C<sub>6</sub>)-alkyl, CON[(C<sub>1</sub>-C<sub>6</sub>)-alkyl]<sub>2</sub>, (C<sub>1</sub>-C<sub>8</sub>)-alkyl, (C<sub>2</sub>-C<sub>6</sub>)-alkenyl, (C<sub>2</sub>-C<sub>6</sub>)-alkynyl, (C<sub>1</sub>-C<sub>6</sub>)-alkoxy, HO-(C<sub>1</sub>-C<sub>6</sub>)-alkyl, (C<sub>1</sub>-C<sub>6</sub>)-alkoxy-(C<sub>1</sub>-C<sub>6</sub>)-alkyl, phenyl, benzyl, (C<sub>1</sub>-C<sub>4</sub>)-alkylcarbonyl, or SO-(C<sub>1</sub>-C<sub>6</sub>)-alkyl, wherein one, more than one or all hydrogens in the alkyl or alkoxy radicals are optionally replaced by fluorine;

A is (C<sub>8</sub>-C<sub>15</sub>) alkanediyl, wherein one or more carbon atoms in the alkanediyl radical are optionally replaced, independently of one another, by O, (C=O), CH=CH, C=C, S, CH(OH), CHF, CF<sub>3</sub>, (S=O), (SO<sub>2</sub>), N((C<sub>1</sub>-C<sub>6</sub>)-alkyl), N((C<sub>1</sub>-C<sub>6</sub>)-alkylphenyl) or NH;

n is a number 2 or 3;

Cycl is a 5 to 6 membered, saturated, partially saturated or unsaturated ring, wherein 1 carbon atom is optionally replaced by O or S;

R3, R4, R5 are, independently of each other, hydrogen, F, Cl, Br, I, OH, NO<sub>2</sub>, CN, COOH, COO(C<sub>1</sub>-C<sub>6</sub>)-alkyl, CO(C<sub>1</sub>-C<sub>4</sub>)-alkyl, CONH<sub>2</sub>, CONH(C<sub>1</sub>-C<sub>6</sub>)-alkyl, CON[(C<sub>1</sub>-C<sub>6</sub>)-alkyl]<sub>2</sub>, (C<sub>1</sub>-C<sub>8</sub>)-alkyl, (C<sub>2</sub>-C<sub>6</sub>)-alkenyl, (C<sub>2</sub>-C<sub>6</sub>)-alkynyl, (C<sub>1</sub>-C<sub>12</sub>)-alkoxy, HO-(C<sub>1</sub>-C<sub>6</sub>)-alkyl, (C<sub>1</sub>-C<sub>6</sub>)-alkoxy-(C<sub>1</sub>-C<sub>6</sub>)-alkyl, (C<sub>1</sub>-C<sub>4</sub>)-alkylphenyl, (C<sub>1</sub>-C<sub>4</sub>)-alkoxyphenyl, S-(C<sub>1</sub>-C<sub>6</sub>)-alkyl, or SO-(C<sub>1</sub>-C<sub>6</sub>)-alkyl,

wherein one, more than one or all hydrogens in the alkyl or alkoxy radicals are optionally replaced by fluorine;

or

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R3 and R4 together with the carbon atoms carrying them are a 5- to 7-membered, saturated, partially or completely unsaturated ring Cyc2,  
 wherein 1 or 2 carbon atoms in the ring are optionally replaced by N, O or S, and  
 wherein Cyc2 is optionally substituted by (C<sub>1</sub>-C<sub>6</sub>)-alkyl, (C<sub>2</sub>-C<sub>5</sub>)-alkenyl, or (C<sub>2</sub>-C<sub>5</sub>)-alkynyl,  
 wherein in each substituent of Cyc2, one CH<sub>2</sub> group is optionally replaced by O, or substituted by H, F, Cl, OH, CF<sub>3</sub>, NO<sub>2</sub>, CN, COO(C<sub>1</sub>-C<sub>4</sub>)-alkyl, CONH<sub>2</sub>, CONH(C<sub>1</sub>-C<sub>4</sub>)-alkyl, or OCF<sub>3</sub>, and  
 R5 is hydrogen.

4. (Currently Amended) A the compound as claimed in of claim 1, wherein

R1, R2 are, independently of each other, hydrogen, (C<sub>1</sub>-C<sub>6</sub>)-alkyl, (C<sub>1</sub>-C<sub>4</sub>)-alkoxy, HO-(C<sub>1</sub>-C<sub>4</sub>)-alkyl, (C<sub>1</sub>-C<sub>4</sub>)-alkoxy-(C<sub>1</sub>-C<sub>4</sub>)-alkyl, F, Cl, CF<sub>3</sub>, OCF<sub>3</sub>, OCH<sub>2</sub>CF<sub>3</sub> (C<sub>1</sub>-C<sub>4</sub>)-alkyl-CF<sub>2</sub>-, phenyl, benzyl, (C<sub>1</sub>-C<sub>4</sub>)-alkylcarbonyl, (C<sub>2</sub>-C<sub>4</sub>)-alkenyl, (C<sub>2</sub>-C<sub>4</sub>)-alkynyl, or COO(C<sub>1</sub>-C<sub>4</sub>)-alkyl;

A is CH=CH-CH<sub>2</sub> or (C<sub>1</sub>-C<sub>4</sub>)-alkanediyl,  
 wherein one or two CH<sub>2</sub> groups are optionally replaced by (C=O),  
 , CH=CH, CH(OH), NH, ClF, CF<sub>3</sub>, or O;

n is a number 2 or 3;

Cyc1 is unsaturated ring, wherein 1 carbon atom is optionally replaced by O or S;

R3, R4, R5 are, independently of each other, hydrogen, F, Cl, Br, I, NO<sub>2</sub>, OH, CN, (C<sub>1</sub>-C<sub>6</sub>)-alkyl, (C<sub>1</sub>-C<sub>8</sub>)-alkoxy, OCF<sub>3</sub>, OCH<sub>2</sub>CF<sub>3</sub>, S-(C<sub>1</sub>-C<sub>4</sub>)-alkyl, COOH,

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HO-(C<sub>1</sub>-C<sub>4</sub>)-alkyl, (C<sub>1</sub>-C<sub>4</sub>)-alkoxy-(C<sub>1</sub>-C<sub>4</sub>)-alkyl, (C<sub>1</sub>-C<sub>2</sub>)-alkylphenyl, or (C<sub>1</sub>-C<sub>2</sub>)-alkoxyphenyl, or

R3 and R4 together are -CH=CH-O-, -CH=CH-S-, -O-(CH<sub>2</sub>)<sub>p</sub>-O-, -O-CF<sub>2</sub>-O-, or -CH=CH-CH=CH-, wherein p = 1 or 2, and

R5 is hydrogen.

5. (Currently Amended) A The compound as claimed in of claim 1, wherein R2 is hydrogen.

6. (Currently Amended) A The compound as claimed in of claim 1, wherein

R1 is hydrogen, CF<sub>3</sub>, (C<sub>1</sub>-C<sub>4</sub>)-alkyl, or phenyl,

R2 is hydrogen,

A is -CH<sub>2</sub>-, -C<sub>2</sub>H<sub>4</sub>-, -C<sub>3</sub>H<sub>6</sub>-, -CH(OH)-, -(C=O)-, -CH=CH-, -CH=CH-CH<sub>2</sub>-, -CO-CH<sub>2</sub>-CH<sub>2</sub>- or -CO-NH-CH<sub>2</sub>-,

n is a number 2 or 3;

Cycl is an unsaturated ring, wherein 1 carbon atom is optionally replaced by S;

R3, R4, and R5 are, independently of each other, hydrogen, F, Cl, I, NO<sub>2</sub>, OH, CN, (C<sub>1</sub>-C<sub>6</sub>)-alkyl, (C<sub>1</sub>-C<sub>8</sub>)-alkoxy, O-CH<sub>2</sub>-phenyl, OCF<sub>3</sub>, S-CH<sub>3</sub>, or COOH or

R3 and R4 together are -CH=CH-O-, -O-(CH<sub>2</sub>)<sub>p</sub>-O-, -O-CF<sub>2</sub>-O-, -CH=CH-CH=CH-, wherein p = 1 or 2, and

R5 is hydrogen.

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7. (Currently Amended) ~~A The compound as claimed in of claim 1, wherein~~  
A is -CH<sub>2</sub>- or -CH<sub>2</sub>-CH<sub>2</sub>-.
8. (Currently Amended) ~~A The compound as claimed in of claim 1, wherein~~  
Cycl is phenyl.
9. (Currently Amended) ~~A The compound as claimed in of claim 1, wherein~~  
Cycl is thiienyl.
10. (Currently Amended) ~~A The compound as claimed in of claim 1, wherein~~  
Cycl is monosubstituted.
11. (Currently Amended) A medicament comprising at least one compound as claimed in claim 1 and a pharmaceutically acceptable carrier.
12. (Original) A medicament comprising at least one compound as claimed in claim 1 and at least one more blood glucose-lowering active ingredient.
13. (Original) A method for treating type 1 or type 2 diabetes, comprising administering to a patient in need thereof an effective amount of at least one compound as claimed in claim 1.
14. (Original) A method for lowering blood glucose, comprising administering to a patient in need thereof an effective amount of at least one compound as claimed in claim 1.
15. (Original) A method for treating type 1 or type 2 diabetes, comprising administering to a patient in need thereof an effective amount of at least one compound as claimed in claim 1 and at least one other active ingredient, wherein the at least one other active ingredient is effective for lowering blood glucose.

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16. (Original) A method for lowering blood glucose, comprising administering to a patient in need thereof an effective amount of at least one compound as claimed in claim 1 and at least one other active ingredient, wherein the at least one other active ingredient is effective for lowering blood glucose.
17. (Original) A process for producing a medicament comprising at least one compound as claimed in claim 1, comprising:  
mixing the at least one compound as claimed in claim 1 with a pharmaceutically suitable carrier, and  
converting this mixture into a form suitable for administration.